

date: 040520

STAR Trigger Tasks: Shutdown 2004

1. FPD

- (a) (done - 040520 - CP)]fix 13th bit problem on fp201
- (b) troubleshoot FPD west (fw009/10 – >fw102)
- (c) find problem with pedestals on East
- (d) troubleshoot FPD east sync problem
- (e) Redo FPE and FPW cabling so cables are no longer dragging on the floor.
- (f) (done - 040520 - LB says OK) change HV to slow controls
- (g) (done - 040520 - FB fixed cable) investigate missing nibble

2. Scalers

- (a) replace short cables to allow board removal
- (b) fix board 5 inputs
- (c) (done - 040520 - JE) add PXZ to patch panel
- (d) revisit documentation

3. BEMC

- (a) investigate bad cable and stuck bits on Bemc east layer 1 – > 2 dsms (BE101)
- (b) Install missing cables in BEMC system internal to the DSM tree.
- (c) install remaining header cables into TDSMIs

4. Platform General

- (a) install mik boxes on east and west side of platform
- (b) get broken fibers on platform repaired
- (c) get pmd fibers to platform routed thru new mik box
- (d) get fpd east and west fibered to platform for concentrator
- (e) document platform fiber usage and get additional if necessary

5. TCD-Related Stuff

- (a) (prog - 040520 - JE tested new device) install new tcd with robo clock and test
- (b) Find and fix problems with TCU-TCD-Detector interface that leads to errors of various types when running from the TCU but not when running from any TCD in stand-alone mode.
- (c) Sort out status of TOF TCD. It has special programming to make it ignore the floating detector bit.
- (d) Find and fix problem with SVT and SSD not working properly when they are both together in a run.
- (e) Find and fix problems with SVT, SSD and others (BTOW?) dealing with the abort and accept commands.

6. DSM-Tree-Related Stuff

- (a) revisit problem of DSM VME64 data corruption on board addr lines
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- (b) Find and fix problem with DMA transfer and Tonkos fast library. If this is successful, change the DSM test code to use the same DMA routines that are used in the real code.
- (c) Find out why the clock registers are not being set and read correctly.

7. TCU-Related Stuff

- (a) Update TCU1 to get the final GDX 12:8 programming and the final PROMs.
- (b) Get TCU scalar data into database along with Scalar Board data.

8. FPGA-Algorithm-Related Stuff

- (a) Review all of Falks algorithms and the documentation. Make sure I understand what is going on and that it all makes sense.
- (b) Upgrade all Tier1 files to be using the same, common set of algorithms except for the last DSM algorithm.
- (c) Change BB101 algorithm so the scalar output includes the BBC TAC difference.

9. Myrinet-Related Stuff

- (a) make myrinet GM2 speed test
- (b) Develop and test the new data pusher to replace Myrinet
- (c) get myrinet monitors connected to ethernet
- (d) Develop and test the software for the above.
- (e) Install and test the new cards.

10. L2-Related Stuff

- (a) fix fans on l2ana01
- (b) move l2 CPUs to new rack
- (c) outfit l2ana01 and l2ana02 with rails
- (d) (done - 040520 - JE) install KVM switch in rack
- (e) install UPS for L2 farm
- (f) Make sure L2 is documented, any problems are understood and there is a plan for next year. This includes making sure we know what all the detectors do in response to an ABORT command.

11. Online Monitoring

- (a) Update the Panitkin plots.
- (b) Update Trg2ntp to unpack all the various bits.

12. general

- (a) retrofit new J1/Jaux/J2 backplanes in labs